IN THE CLAIMS

Please cancel Claims 1, 9 and 11 and amend the remaining Claims in conformity with the following markup copy:

1. (Canceled).

2. (Currently Amended) ~~The method of Claim 1, further comprising~~ A method of network communications, comprising:

classifying a communications session to produce a session classification;

selectively accelerating said communications session in conformity with said classification; and

determining whether or not a threshold number of sessions has been reached for said session classification, and wherein said acceleration is disabled for said communications session in response to determining that said threshold number of sessions has been reached.

3. (Currently Amended) ~~The method of Claim 1, further comprising~~ A method of network communications, comprising:

classifying a communications session to produce a session classification;

selectively accelerating said communications session in conformity with said classification; and

in response to said classifying, determining whether or not said session classification is of a class selected for bypassing said acceleration, and wherein said accelerating is disabled for said communications session in response to determining that said class is selected for bypassing said acceleration.

4. (Currently Amended) ~~The method of Claim 1~~ A method of network communications, comprising:

classifying a communications session to produce a session classification; and

selectively accelerating said communications session in conformity with said classification, wherein said classifying determines that said communications session is a low priority type of session and further comprising determining whether or not resources are available for accelerating said communications session, wherein said accelerating is performed for said communications session in response to determining said resources are available, and wherein said accelerating may be ceased in response to a request to accelerate a higher-priority session.

5. (Original) The method of Claim 4, wherein said classifying classifies said communications session by type of transmission by examining a destination port number, and wherein said accelerating is selectively performed in conformity with said type of transmission.

6. (Currently Amended) ~~The method of Claim 1~~ , A method of network communications, comprising:

    classifying a communications session to produce a session classification;

    selectively accelerating said communications session in conformity with said classification; and wherein said communication session is a transmission control protocol (TPC) session, and wherein said acceleration is performed by[[:]]

    locally terminating said TCP session,[[;]]

    converting a TCP datum to a proprietary protocol datum for transmission over a satellite communications channel,[[;]] and

    reconstructing said TCP datum at a receiving end of said satellite communications channel.

7. (Currently Amended) ~~The method of Claim 1~~ A method of network communications, comprising:

    classifying a communications session to produce a session classification; and

3060P2303

selectively accelerating said communications session in conformity with said classification, wherein said classifying further determines that said communications session is to be coupled through a satellite communications channel, and wherein said accelerating is selectively performed in conformity with said determination.

8. (Currently Amended) ~~The method of Claim 1~~ A method of network communications, comprising:

classifying a communications session to produce a session classification; and

selectively accelerating said communications session in conformity with said classification, wherein said acceleration has a controllable data rate configured by adjusting a buffer size associated with said communications session.

9. (Canceled).

10. (Currently Amended) ~~The method of Claim 1, further comprising:~~ A method of network communications, comprising:

classifying a communications session to produce a session classification;

selectively accelerating said communications session in conformity with said classification;

3060P2303

pre-empting resources from an existing communications

session of lower-priority than said communications session and

using them for said accelerating; and

throttling said existing communications session by using a

transmission control protocol (TCP) flow control mechanism.

11. (Canceled).

12. (Currently Amended) ~~The system of Claim 11~~ A system

comprising:

a packet processor for processing communications packets;

and

a network coupled to said packet processor, wherein said

packet processor classifies a communications session to produce

a session classification and selectively accelerates said

session in conformity with said session classification, wherein

said packet processor further determines whether or not a

threshold number of sessions has been reached for said session

classification, and wherein said packet processor does not

accelerate said communications session if said threshold number

of sessions has been reached.

13. (Currently Amended) ~~The system of Claim 11~~ A system comprising:

a packet processor for processing communications packets; and

a network coupled to said packet processor, wherein said packet processor classifies a communications session to produce a session classification and selectively accelerates said session in conformity with said session classification, wherein said packet processor further determines whether or not said session classification is of a class selected for bypassing said acceleration, and wherein said packet processor does not accelerate said communications session if class is selected for bypassing said acceleration.

14. (Currently Amended) ~~The system of Claim 1~~ A system comprising:

a packet processor for processing communications packets; and

a network coupled to said packet processor, wherein said packet processor classifies a communications session to produce a session classification and selectively accelerates said session in conformity with said session classification, wherein said packet processor determines that said communications

session is a low priority type of session and that resource

availability is less than a threshold value, and wherein said

packet processor does not accelerate said communications session

in response to determining that said communications session is a

low priority type of session and that said resource availability

is less than a threshold value.

15. (Currently Amended) ~~The system of Claim 11~~ A system

comprising:

   a packet processor for processing communications packets;

and

   a network coupled to said packet processor, wherein said

packet processor classifies a communications session to produce

a session classification and selectively accelerates said

session in conformity with said session classification, wherein

said packet processor classifies said communications session by

type of transmission by examining a destination port number, and

wherein said packet processor does not accelerate said

communications session in response to determining that said

communications session is a lower priority type of transmission.

16. (Currently Amended) ~~The system of Claim 11~~ A system

comprising:

a packet processor for processing communications packets; and

a network coupled to said packet processor, wherein said packet processor classifies a communications session to produce a session classification and selectively accelerates said session in conformity with said session classification, wherein said packet processor processes an transmission control protocol (TPC) session, and wherein said acceleration is performed by locally terminating said TCP session, converting data to a proprietary for transmission over a satellite communications channel for subsequent reception and reconstruction of said TCP session by another packet processor at a receiving station.

17. (Currently Amended) ~~The system of Claim 11~~ A system comprising:

a packet processor for processing communications packets;

a network coupled to said packet processor, wherein said packet processor classifies a communications session to produce a session classification and selectively accelerates said session in conformity with said session classification; and

a satellite communication channel, ~~and~~ wherein said packet processor determines that said communications session is to be coupled through said satellite communication channel, and

wherein said packet processor accelerates said communications session in conformity with said determination.

18. (Currently Amended) ~~The system of Claim 11~~ A system comprising:

a packet processor for processing communications packets; and

a network coupled to said packet processor, wherein said packet processor classifies a communications session to produce a session classification and selectively accelerates said session in conformity with said session classification, wherein said packet processor accelerates said communication session by removing resources used by an existing communication session and throttles said existing communications session by using a transmission control protocol (TCP) flow control mechanism.

19. (Original) A network device comprising:

a plurality of network ports for connecting network devices;

a packet processor coupled to said plurality of network ports for processing packets communicated from or to said ports;

a memory coupled to said packet processor for storing data and program instructions for execution by said packet processor;

a satellite communications interface for coupling said

packet processor to a satellite communications channel; and

program means executed by said packet processor for

selectively accelerating a communications session between at

least one of said plurality of network ports and said satellite

communications interface, wherein said selective acceleration is

performed in response to a classification of said communications

session.

20. (Original) A computer program product comprising program

instructions encoded in signal bearing media for execution by a

packet processor, wherein said program instructions selectively

accelerate a communications session for transmission over a

satellite communications channel, wherein said selective

acceleration is performed in response to a classification of

said communications session.

21. (Original) A configuration manager comprising program

instructions encoded in signal bearing media for execution by a

processor coupled to a configuration console, wherein said

program instructions produce configuration data for directing a

packet processor to selectively accelerate a communications

session for transmission over a satellite communications

channel, wherein said selective acceleration is performed in response to a classification of said communications session.

22. (Original) The configuration manager of Claim 21, wherein said configuration console is a web page displayed on a browser coupled to the Internet, and wherein said configuration data is produced by entering data within fields on said web page for transmission to said packet processor.